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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/754,698	01/03/2001	Ronald Quan	201	2798

31665 7590 10/01/2004

PATENT DEPARTMENT  
MACROVISION CORPORATION  
2830 DE LA CRUZ BLVD.  
SANTA CLARA, CA 95050

EXAMINER
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SONG, HOSUK

ART UNIT	PAPER NUMBER
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2135

DATE MAILED: 10/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/754,698

Applicant(s)

QUAN, RONALD

Examiner

Hosuk Song

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 January 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7, 9-12, 19-20, 23-24, 26-28, 30-32, 34, 38-41, 43 and 51-53 is/are rejected.
- 7) ☒ Claim(s) 5-6, 8, 13-18, 21-22, 25, 29, 33, 35-37, 42, 44-50, 54-56 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-3,9-12,19-20,23-24,26,38-41,43,51-53 are rejected under 35 U.S.C. 102(b) as being anticipated by Quan et al.(US 5,194,965).

Claims 1,7,9-12,19: Quan disclose sensing a time interval which occurs between selected edges of pulses occurring in selected video lines in the vertical blanking interval in (col.5,lines 1-6). Quan disclose generating a vertical/frame rate signal in a desired location in the VBI in response to the sensed time interval, wherein the vertical/frame rate signal reliably indicates the presence of the VBI in (col.2,lines 62-68;col.3,lines 1-8;col.4,lines 62-67).

Claim 2: Quan disclose selected edges of pulses occur in pre-equalizing, post-equalizing or vertical sync pulse intervals of the VBI in the selected video lines in (col.4,lines 62-68;col.5,lines 1-6 and fig.3e).

Claim 3: Quan disclose producing a timing signal indicative of the desired location; and regenerating a reliable vertical/frame rate signal at the desired location in response to the timing signal in (col.4,lines 56-67).

Claim 23-24,26,38-40: Quan disclose a timing circuit receiving the video signal for providing a timing signal indicative of the sync signals in the video signal in (fig.1 and 3e). Quan disclose a processing circuit responsive to the timing signals for sensing selected pulse widths and/or pulse edge spacings which are peculiar to the video signals in the VBI and for generating a vertical frame rate signal in (col.2,lines 62-68;col.3,lines 1-8;col.4,lines 62-67).

Claim 20: Quan disclose modifying the copy protection signs in response to the generated vertical rate signal to attenuate or defeat the effects of the copy protection signal in the video signal in (col.2,lines 59-68;col.3,lines 1-8).

Claim 41: Quan disclose a second processing circuit responsive to the generated reliable vertical/frame rate signal for selectively modifying the normal video signal or the copy protection signal in (fig.1 and col. 2,lines 62-68;col.3,lines 1-8;col.4,lines 62-67).

Claims 43,51-53: see claims 1,23 rejections above.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 4, 27-28,30-32,34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Quan et al.(US 5,194,965).

Claim 4: Quan does not specifically disclose sensing the time interval between H sync pulses and detecting when the time interval between H sync signals is about 32 microseconds rather than normal 64 microseconds, which only occurs in the VBI. The examiner takes Official notice that detecting when the time interval between H sync signals is about 32 microseconds rather than normal 64 microseconds, which only occurs in the VBI is well known in the art. One of ordinary skill in the art would have been motivated to detect time interval between H sync signals is about 32 microseconds in order to detect copy protected signals other than VBI thus ensuring security of its signal.

Claims 27-28,30-32,34: Quan does not specifically disclose a spacing detector for sensing a period of 32 microseconds  $\pm$  20% between pulse transition spacings; and responsive

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to the spacing detector for generating the vertical/frame rate signal in. Official notice is taken that this is well known in the art. One of ordinary skill in the art would have been motivated to use a spacing detector for sensing a period of 32 microseconds  $\pm$  20% between pulse transition spacings; and responsive to the spacing detector for generating the vertical/frame rate signal in order to enhance signal security and detect copy protected signals against intruders.

### ***Allowable Subject Matter***

3. Claims 5,6,8,13,21,25,29,33,35,36,42,44-48,54-55 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 14-18 are depended on claim 13.

Claim 22 depended on claim 21.

Claim 37 depended on claim 36.

Claims 49-50 depended on claim 48.

Claims 56 depended on claim 55.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Ezaki et al.(US 5,822,425).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hosuk Song whose telephone number is 703-305-0042. The examiner can normally be reached on Tue-Fri from 6:00 am to 4:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 703-305-4393. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**\*\* Please note of following changes starting 10/25/2004\*\*.**

- a) New telephone number for TC 2100 receptionist is 571-272-2100.
- b) New contact number for Examiner is 571-272-3857
- c) New contact number for Examiner's supervisor is 571-272-3859.

HS

*Handwritten signature*  
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